Title of the Invention

Please amend the title of the invention to read as follows:

--METHOD FOR FORMING NOVEL ZERO INSERTION FORCE SOCKETS USING NEGATIVE THERMAL EXPANSION MATERIALS--

In the Claims

Please cancel claims 20, 24, 25, 28, 33, 37, 38, and 41 without prejudice or disclaimer to the subject matter thereof.

Please amend the claims as follows:

18. (once amended) A method of forming a socket for receiving a terminal pin from an electronic component therein, comprising in order:

(1) forming a layer of a first material on an upper surface of a substrate;

(2) forming a layer of a second material on said layer of said first material; and

(3) forming an aperture in said first and second layers to expose said upper surface of said substrate;

wherein said first material has a positive coefficient of thermal expansion and said second material has a negative coefficient of thermal expansion.

19. (once amended) The method in accordance with claim 18, further comprising, prior to step (1) of forming a layer of a first material:

forming an electrical contact pad on said substrate such that said contact pad is at least partially exposed within said aperture.

~~21.~~ 3 (once amended) The method in accordance with claim ~~18~~ 1, wherein said first material is a polyimide.

~~22.~~ 4 (once amended) The method in accordance with claim ~~18~~ 1, wherein said second material is zirconium tungstate.

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23. (once amended) The method in accordance with claim 22, wherein said zirconium tungstate is single-crystal zirconium tungstate.

~~26.~~ (once amended) The method in accordance with claim ~~18~~, further comprising, between step (1) of forming a layer of a first material and step (2) of forming a layer of a second material:

applying an interfacial material between said layer of first material and said layer of second material to permit relative movement between said layer of first material and said layer of second material.

~~27.~~ (once amended) The method in accordance with claim ~~18~~, wherein said substrate is ceramic.

29. (once amended) The method in accordance with claim 18, wherein said layer of first material is bonded to said substrate using a spin-on and photo define/etch process.

~~30.~~ (once amended) The method in accordance with claim ~~18~~, wherein said step (3) of forming said aperture comprises forming a first aperture in said layer of first material and a second aperture in said layer of second material, wherein said second aperture has a linear dimension smaller than said first aperture.

31. (once amended) A method of electrically connecting an electronic component having a contact pin extending therefrom to a contact pad on a substrate, comprising, in order:

(1) forming a layer of a first material on an upper surface of said substrate;

(2) forming a layer of a second material on said layer of said first material; and

(3) forming an aperture in said first and second layers to expose said upper surface of said substrate;

wherein said first material has a positive coefficient of thermal expansion and said second material has a negative coefficient of thermal expansion;

and wherein said method further comprises, in order, subsequent to step (3) of forming an aperture in said first and second layers:

(4) heating said layer of first material and said layer of second material to a temperature substantially above a range of normal operating temperatures for said electronic component;

(5) inserting said contact pin into said aperture; and

(6) cooling said layer of first material and said layer of second material to a temperature within said range of normal operating temperatures for said electronic component.

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~~32~~. (once amended) The method in accordance with claim ~~31~~ 10, further comprising, prior to step (1) of forming a layer of a first material:

forming an electrical contact pad on said substrate such that said contact pad is at least partially exposed within said aperture.

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~~34~~. (once amended) The method in accordance with claim ~~31~~ 10, wherein said first material is a polyimide.

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~~35~~. (once amended) The method in accordance with claim ~~31~~ 10, wherein said second material is zirconium tungstate.

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~~36~~. (once amended) The method in accordance with claim ~~35~~ 13, wherein said zirconium tungstate is single-crystal zirconium tungstate.

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~~39~~. (once amended) The method in accordance with claim ~~31~~ 10, further comprising, between step (1) of forming a layer of a first material and step (2) of forming a layer of a second material:

applying an interfacial material between said layer of first material and said layer of second material to permit relative movement between said layer of first material and said layer of second material.

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~~40~~. (once amended) The method in accordance with claim ~~31~~ 10, wherein said substrate is ceramic.

~~42~~. (once amended) The method in accordance with claim ~~31~~, wherein said layer of first material is bonded to said substrate using a spin-on and photo define/etch process.

~~43~~. (once amended) The method in accordance with claim ~~31~~, wherein said step (3) of forming said aperture comprises forming a first aperture in said layer of first material and a second aperture in said layer of second material, wherein said second aperture has a linear dimension smaller than said first aperture.

~~44~~. (once amended) The method in accordance with claim ~~31~~, wherein said step (4) of heating said layer of first material and said layer of second material comprises heating said layer of first material and said layer of second material to a temperature of between approximately 200ºC and 250ºC.

~~45~~. (once amended) The method in accordance with claim ~~44~~, wherein a normal operating temperature for said electronic component is approximately 100ºC.

~~46~~. (once amended) The method in accordance with claim ~~31~~, wherein said step (6) of cooling said layer of first material and said layer of second material comprises cooling said layer of first material at a rate slower than the rate at which said layer of second material is cooled.

In the Abstract

Please amend the Abstract at page 15, lines 2-8, by replacing it with the following:

--A method of forming a socket device for receiving a connection pin is disclosed, the socket device including a substrate having an upper surface. The socket device includes a connection pad disposed on the upper surface and a first layer disposed on the upper surface and on the connection pad. The first layer includes material having an overall positive coefficient of thermal expansion, and may be formed on the upper surface using conventional spin-on deposition techniques. The socket device includes a second layer disposed on the first layer. The second layer includes material having an overall negative coefficient of thermal expansion. The socket